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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,467	07/09/2001	Andreas Gerlach	GERLACH ET AL. - 1	5638

7590 11/10/2003
COLLARD & ROE, P.C.
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EXAMINER

OLSEN, KAJ K

ART UNIT PAPER NUMBER

1753

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,467

Applicant(s)

GERLACH ET AL.

Examiner

Kaj Olsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7/09.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In claim 21, applicant specifies that the analysis unit is “consisting of at least two reservoirs”. The examiner reminds the applicant that the term “consisting” is closed language limiting that aspect of the invention to only those elements explicitly recited (see MPEP 2111.03). Hence applicant is essentially stating that the number of reservoirs is bounded (i.e. consisting) by an unbounded number (i.e. at least two). This is confusing and the applicant should just use “comprising” instead.

4. In claim 21, applicant sets forth the presence of two electrical conductors. However, in the limitations about the conductors that follow the recitation of the conductor, it is unclear if applicant is referring to one or both of the conductors. If applicant is referring to both, the limitations are further confusing. For example, claim 21 states that the conductor is connected to a singular contact point. According to the specification, one would not make both conductors go to the same contact point. The examiner believes the applicant should instead amend the claim to specify that *each* conductor has its end regions connected in the specified manner.

5. In claims 24-26, there is no antecedent basis for the terms “reservoir floor” or “reservoir wall”.

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6. In claims 25 and 26, the reference to “the conductor” is confusing because claim 21 specified two conductors and it is unclear which conductor (if not both) the applicant is referring to.

7. In claims 27-29, it is unclear how to interpret the term “the contact points” when claim 21 only identified the presence of a single contact point.

8. In claim 32, “predeterminable” should be --predetermined--.

9. It would appear that claim 35 is an attempt to claim four reservoirs with each pair of reservoirs being connected by a passage (and thereby possessing two passages). However, the way the applicant has defined it is confusing. Stating that “two respective reservoirs are connected to a passage” doesn’t make it clear how many passages are actually present and how each of those passages are connected to the four reservoirs. Hence there is no antecedent basis for the term “the two passages” and it is entirely unclear what “the other” is referring to (the other what?).

10. In claims 36 and 37, there is no antecedent basis for “the four reservoirs”. It would appear that these claims should depend from claim 35 and not claim 21.

11. Claim 36 is further confusing because what structure is being represented by the phrase “laid out in a pattern used as standard for a microtitre plate”. Apparatus claims should be constructed with language that positively recites what the invention is and not how the invention is to be used.

12. In claim 37, applicant’s use of the term “row width” is confusing because the applicant has not defined in the claim what the term “row width” is referring to. Moreover, applicant’s reference to the row of the analysis units is entirely confusing because applicant hasn’t specified

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in either claims 21 or 37 that there are a plural number of analysis units. Hence the phrase “row width of the analysis units” has no clear meaning in this claim.

13. Claims 38-40 all refer to “the base plate” and “the cover plate”. However, claim 21 (from which these claims depend) never identified that the main body comprises base plates and cover plates and these terms thereby lack antecedent basis. It would appear that these claims should depend from claim 22 which did set forth the presence of base and cover plates.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 21-25, 27-32, 34-36, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Chow et al (USP 5,989,402) with evidence provided by Hu et al (USP 6,623,860 B2).

16. With respect to the claim 21 as best understood, Chow discloses an analysis system comprising a main body 10 with an analysis unit comprising eight reservoirs 24 placed in flow connection by at least one passage 16 (fig. 1). Chow further discloses that electrical conductors 306 are provided in the main body with one end region being disposed in the reservoirs while the second end constituting a contact point 304 (fig. 3A, col. 12, lines 25-56).

17. With respect to claim 22, the main body comprises both a cover plate 22 and a base plate 12 (fig. 1).

18. With respect to claim 23, see col. 12, lines 34-41.
19. With respect to claims 24 and 25, see fig. 3A, 4B, and 4C, and col. 15, lines 6-43.
20. With respect to claim 27, compare elements 304 with elements 24 in fig. 3A.
21. With respect to claim 28, see fig. 3A.
22. With respect to claim 29, see col. 13, lines 50-64.
23. With respect to claims 30 and 31, that is only the intended use of the apparatus and the intended use need not be given further due consideration in determining patentability (see alternative rejection below).
24. With respect to claim 32, fig. 6 shows at least 3 units (i.e. 4 units total) and 3 satisfies the claimed formula.
25. With respect to claim 34, see col. 6, lines 22-26.
26. With respect to claim 35 and 36 (those limitations not covered above), each analysis unit comprises at least four reservoirs and two intersecting channels (fig. 6).
27. With respect to claims 38 and 39, see col. 6, lines 1-10. Hu evidences that a number of these plastics are inherently at least partially opaque (col. 8, lines 23-37).
28. With respect to claim 40 (those limitations not already covered above), see col. 6, lines 34-40.
29. Claims 21-26, 28-32, 34, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Zanzucchi et al (USP 5,585,069).
30. Zanzucchi discloses an analysis system comprising main body having at least two reservoirs (36, 40, 42, 44, or 46) in flow connection via passage 38 (fig. 2). Zanzucchi also discloses electrical conductors 55 that have one end connected to the various reservoirs (54, 57,

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59) and at the other end to a surface of the main body 56 (fig. 4A-5B). With respect to the conductors constituting at least part of the reservoir floor and walls, see fig. 4B.

Claim Rejections - 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

33. Claim 33 (and 30, 31, and 36 in the alternative) are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow in view of Sundberg et al (USP 6,086,825).

34. Chow set forth all the limitations of the claim 33, but did not explicitly recite the presence of 96 analysis units. With respect to claims 30, 31, and 36, Chow never explicitly stated the arranging of the elements for standard microtiter technology (although the claims don't appear to explicitly recite any structure associated with microtiter technology). Sundberg teaches in an alternate analysis system that 96 units is a conventional number of units to utilize

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because of conventional configurations of microtiter plates (col. 5, lines 61-65). It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Sundberg for the analysis unit of Chow in order to interface the unit with already conventional microtiter technology.

35. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chow.

36. Chow set forth all the limitations of the claim (as best understood), but did not explicitly recite the use of the set forth row width details. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the set forth row width relationships, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (703) 305-0506. The examiner can normally be reached on Monday through Thursday from 7:00 AM-4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached at (703) 308-3322.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of this application. This will expedite processing

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of your papers. The fax number for regular communications is (703) 305-3599 and the fax number form after-final communications is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'Kaj K. Olsen', with a long horizontal flourish extending to the right.

Kaj K. Olsen
Patent Examiner
AU 1753
November 5, 2003